

NAVAL MEDICAL RESEARCH AND DEVELOPMENT News

Volume II, Issue 11

November 2010

Navy Surgeon General Visits Aerospace Medicine Laboratory

Vice Adm. Adam M. Robinson, Jr., U.S. Navy Surgeon General, visited the Naval Aerospace Medical Research Laboratory (NAMRL) October 20. Cmdr. Rita Simmons, the current Naval Medical Research Unit-Dayton (NAMRU-Dayton) executive officer and former NAMRL officer in charge, presented a command overview that included briefings on NAMRL's mission, current research programs, product lines, technology transfer accomplishments, as well as Base Realignment and Closure (BRAC) plans and major milestones.

Vice Adm. Robinson toured the facility and its labs and received a first-hand look at how NAMRL supports the fleet and warfighter mission.

He recognized NAMRL's critical role in support of Navy Medicine Research and Development (R&D) and lauded the laboratory's leading-edge aeromedical research and truly outstanding



NAMRL leadership presents a briefing package to the Surgeon General and Force Master Chief. From left: Cmdr. Rita Simmons, officer in charge; Vice Adm. Adam Robinson, Surgeon General; Lt. John Gardner, flag aide; FORCM Laura Martinez; Lt. Cmdr. Robert Higgins, deputy officer in charge. Photos provided by NAMRL.

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technology transfer accomplishments. He expressed confidence in NAMRL's continued success as a result of the BRAC relocation to Wright-Patterson Air Force Base and merger with the [Environmental Health Effects Laboratory](#) (EHEL) to create NAMRU-Dayton. He is looking forward to even greater innovation and creativity as a result of the numerous regional partnering opportunities with the 711 Human Performance Wing, Air Force Research Laboratory, U.S. Air Force School of Aerospace Medicine, local universities, and Dayton technology transfer activities.

Vice Adm. Robinson referred to the establishment of NAMRU-Dayton as a reinvestment in Navy Medicine R&D for the 21st Century.

NAMRL is proud to be a part of this

historic event and is confident the synergy resulting from combining NAMRL and EHLE will result in even greater opportunities to advance operational medicine research and transition our products to the Fleet.



The Surgeon General receives a briefing from NAMRL scientist Dr. Jeffrey Phillips on the Reduced Oxygen Breathing Device and the lab's hypoxia research.

Commanding Officer's Message

Greetings,

Our success is based on the strengths and scientific expertise present at all our laboratories. We are developing the human and technological resources and the important partnerships essential to successfully meet our mission.

As I review the content of this newsletter, I see several stories recognizing the talented, dedicated and diverse team whose efforts represent all who make up the Naval Medical Research Center Enterprise and who continue to build our reputation for biomedical research excellence.

- HM1 George Odom, our Sailor of the Year.
- The NHRC team that received the CDC 2010 Excellence in Public Health Response Award.
- The outstanding staff at the Gorgas Memorial Library who received the FLICC Award for Federal Librarianship from the Librarian of Congress.
- NAMRL's opportunity to brief the Surgeon General, who lauded the laboratory's leading-edge aeromedical research and their technology transfer accomplishments, which will continue as NAMRL becomes part of NAMRU-Dayton.

The myriad of partnerships mentioned in this newsletter go from local to global. NAMRU-Dayton's expanding partnership with University of Dayton, NAMRU-3's work with the Noguchi Memorial Institute for Medical Research to investigate Lassa fever in Ghana and partnering with WHO providing influenza surveillance training for students from Egypt, Oman and Morocco. NMRC is working with Peruvian epidemiologists and NAMRU-2 in Singapore launched a new agreement with the Regional Emerging Diseases Intervention Center, and many more. Successful and accomplished people create outstanding and productive partnerships that help us meet our mission.



Commanding Officer sends,
Richard L. Haberberger, Jr.
CAPT, MSC, USN

HM1 George Odom Named NMRC Regional Sailor of the Year

Hospital Corpsman First Class Petty Officer George W. Odom, Sr. has been selected as Naval Medical Research Center (NMRC) Regional Sailor of the Year 2010 and will represent the command at the Naval Medical Support Command Regional Sailor of the Year Board November 19. A native of Alabama, Odom graduated high school in 1991. After recruit training, he completed Ocean System Technician Analyst "A" School in Norfolk, Virginia. After a rate closure, Petty Officer Odom cross-rated into the Dental Technician rating, which merged into the Hospital Corpsman rating in March 2005.

His duty assignments include Naval Ocean Processing Facility, Dam Neck, Va.; Augmented: *USNS ZEUS* Cheatham Annex, Williamsburg, Va.; Branch Dental Clinic, Dam Neck, Va.; 2D DENBN/NDC 2nd FSSG II MEF, Camp Lejeune, N.C.; 24th Marine Expeditionary, Special Operation Capable; Augmented: *USS WASP*,

Norfolk, Va.; *USS PONCE*, Norfolk, Va.; *USS KEASARGE*, Norfolk, Va.; Naval Dental Center Norfolk Dental Aug DET, Norfolk, Va.; and Naval Medical Center, Portsmouth, Va.

HM1 Odom graduated from Advance Medical Laboratory "C" School in February 2008 and received orders to NMRC, Silver Spring, Md., where he assumed the duties as the Leading Petty Officer of Operations within the Biological Defense Research Directorate and the Command Drug and Alcohol Program Advisor.

Petty Officer Odom is a distinguished graduate of the Southern Illinois University of Carbondale and holds a Bachelor of Science Degree in Workforce Education and Development. Also, he obtained an Associate of Applied Science Degree in Medical Laboratory Science from Thomas Nelson Community College, Newport News, Va. and is currently working towards his Master in Divinity Degree at Liberty Baptist Theological Seminary



and Graduate School.

His personal awards include the Navy and Marine Corps Achievement Medal (seven awards), Good Conduct (six awards), Fleet Marine Force, Military Outstanding Volunteer Service Medal and various service, unit and campaign awards.

Navy Medicine Lab Stands Up at Air Force Base in Ohio

Naval Medical Research Unit-Dayton ([NAMRU-Dayton](#)) was activated October 6 during a ceremony at Wright Patterson Air Force Base (WPAFB) hosted by Capt. Richard L. Haberberger, Jr., the Naval Medical Research Center ([NMRC](#)) commanding officer.

NAMRU-Dayton represents the latest 2005 Base Realignment and Closure (BRAC) action completed by Navy Medicine. Two laboratories combined – the Naval Aerospace Medical Research Laboratory ([NAMRL](#)), relocating from Naval Air Station Pensacola, and the Environmental Health Effects Laboratory ([EHEL](#)), located at WPAFB since 1976.

Rear Adm. Eleanor Valentin, commander, Navy Medicine Support Command, and keynote speaker for the ceremony, called the event historic. “The merger of these two detachments creates a premier military operational medicine laboratory. NAMRU-Dayton will be able to answer a broad range of operationally relevant research questions across a range of warfighting domains, and across the research spectrum – from basic research to advanced technology development, and beyond.”

Capt. Keith Syring is NAMRU-Dayton’s first commanding officer, and



Left to right: Capt. Richard Haberberger, commanding officer, Naval Medical Research Center; Rear Adm. Eleanor Valentin, commander, Navy Medicine Support Command; Capt. Keith Syring, Naval Medical Research Unit-Dayton commanding officer; and Cmdr. Rita Simmons, NAMRU-Dayton executive officer; cut the ceremonial cake following the NAMRU-Dayton activation ceremony. Photos by Larry Coffey, NMSC Public Affairs Officer.

Cmdr. Rita Simmons is the first executive officer.

In addition to its headquarters in Silver Spring, Md., NMRC now has four labs in the continental United States (the [Naval Health Research Center](#), San Diego; the [Naval Submarine Medical Research Laboratory](#), Groton Ct.; [NAMRU-San Antonio](#), Texas; and

now NAMRU-Dayton) along with three labs outside the continental United States ([NAMRU-2](#) Pacific, Pearl Harbor, Hawaii; [NAMRU-3](#), Cairo, Egypt; and the [Naval Medical Research Center Detachment](#), Lima, Peru).

This represents an enterprise that provides critical mission support to the Navy and the Marine Corps. The more than 1,600 men and women who make up the global R&D team represent an impressive array of academic and scientific knowledge with years of practical experience in science, medicine and the military.

This team spirit is illustrated very well with the stand up of NAMRU-Dayton and the incredible people who will be working there. While retaining the unique missions and capabilities of NAMRL and EHEL in the areas of aerospace medicine and toxicology research, NAMRU-Dayton assumes a new role as the Navy flagship lab in a newly formed Department of Defense Center of Excellence for Aerospace Medicine Research, Education and Training located at WPAFB.



Capt. Keith Syring, NAMRU-Dayton’s first commanding officer, speaks during the command activation ceremony.

NHRC Wins International CDC Award for H1N1 Discovery

By Shawn Richeson, NHRC Public Affairs



The Naval Health Research Center (NHRC) is the recipient of the CDC 2010 Excellence in Public Health Response Award

for its early detection and global response during the pandemic H1N1 outbreak.

NHRC was the first military lab to confirm pandemic H1N1 using the CDC's FDA-approved real-time polymerase chain reaction (PCR) detection assay.

The NHRC team competed against more than 140 federal, state, regional, national and international labs, including labs in Canada and Australia. LRN and its partners maintain an integrated national and international network of laboratories equipped to respond to chemical or biological terrorism, emerging infectious diseases and other public health threats and emergencies. NHRC has been a member of the LRN since 2004.

"The Naval Health Research Center laboratory identified the first two cases of novel H1N1 influenza worldwide," said Scott J. Becker, executive director of the Association of Public Health Laboratories, during the October CDC Laboratory Response Network (LRN) annual meeting. "Early identification and sharing of information with local, national and global public health authorities facilitated a rapid public health response to the pandemic."

NHRC processed nearly 200 pandemic samples per week, along with 100 samples per week from routine surveillance, during the initial stages of the H1N1 pandemic.

"We are honored to have won the LRN's award in recognition of the identification and response to the 2009 H1N1 pandemic," said Cmdr. Patrick J. Blair, NHRC Respiratory Diseases Research Department director. "What is key is that this award recognizes



Capt. Gregory Utz, commanding officer, Naval Health Research Center; Cmdr. Patrick Blair, director, Department of Respiratory Disease Research, NHRC; Anthony Hawksworth, research analyst, Department of Respiratory Disease Research, NHRC. Photos provided by NHRC Public Affairs.

the NHRC laboratory – that is the team of administrators, clinicians, scientists and technicians who day in and day out manage and conduct our many research and clinical protocols."

The Excellence in Public Health

Response Award is given to the CDC LRN member laboratory that made significant contributions by responding to public health threats, unique cases or incidents, or exemplified a surge capacity response.



A research technician at NHRC conducts assays under a safety cabinet.

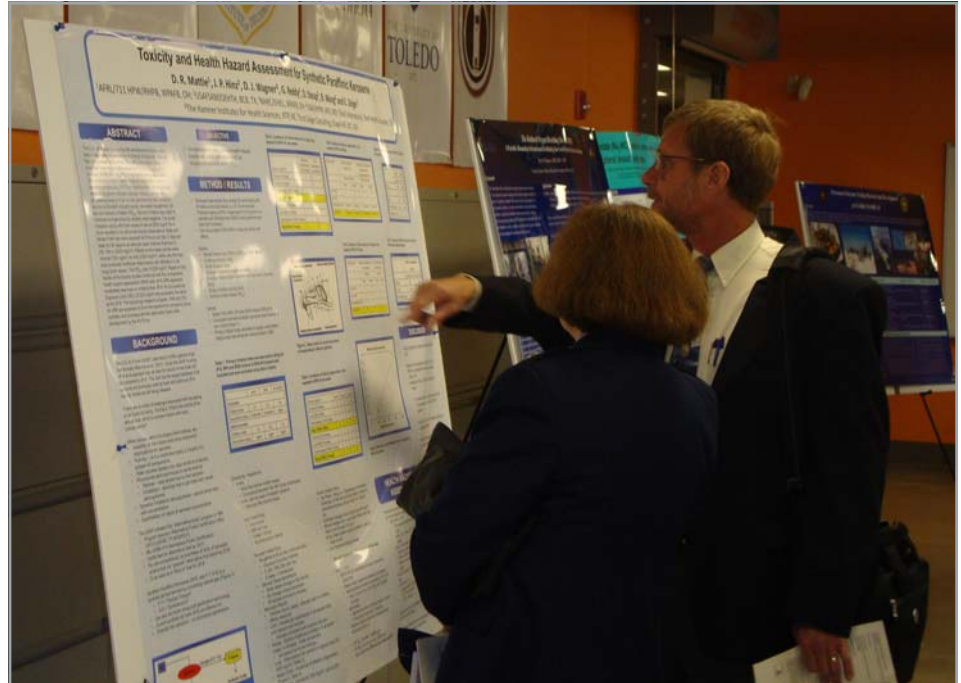
Innovation on Display at NAMRU-D Research Capabilities Showcase

By Dr. Joseph Chandler, NAMRL

The Naval Medical Research Unit-Dayton ([NAMRU-Dayton](#)), activated October 6, hit the ground running with a showcase of its research capabilities October 7 hosted by the University of Dayton Research Institute (UDRI).

Posters, demonstrations and presentations featured past, present and future work from NAMRU-Dayton researchers. Several UDRI and University of Dayton (UD) labs also featured their work, and an impressive array of commercial, government and University-sponsored ventures within the Institute for the Development and Commercialization of Advanced Sensor Technology (IDCAST) were represented.

Ground-breaking technology was a main attraction, including NAMRU-Dayton's new one-of-a-kind Disorientation Research Device (DRD); state-of-the-art hypoxia, motion sickness and fatigue laboratories; and UDRI and IDCAST's facial recognition and terahertz lab capabilities. Innovative thinking for



Two Air Force researchers discuss their recent work at the science showcase poster session. Photo provided by NAMRU-Dayton.

the warfighter was on display with information on NAMRU-Dayton's inhalation and exposure surveys in Iraq and Af-

ghanistan sharing space with IDCAST's next-generation Unmanned Aerial System designs.

Gorgas Memorial Library Receives Award for Federal Librarianship



From left to right: Dr. James Billington (Librarian of Congress), Terrie Wheeler (Gorgas Memorial Library director), Col. Gray Heppner (WRAIR deputy commander), Terri Brantley (head, NMRC Office of Research Administration).

The Federal Library and Information Center Committee (FLICC) announced the winners of its national awards for federal librarianship. FLICC honored the award winners at the 2010 Fall FEDLINK membership meeting October 6 at the Library of Congress in Washington, where the winners received their awards from the Librarian of Congress James H. Billington.

The [Gorgas Memorial Library](#) at the Naval Medical Research Center (NMRC)/Walter Reed Army Institute of Research (WRAIR), Silver Spring, Md., won the small library/information center award. Terri Brantley, head of NMRC's Office of Research Administration, represented NMRC.

The Gorgas Memorial Library was recognized for its 2009 implementation of a citation database and citation management system. Librarians create innovative products such as publication strategies and research impact

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NAMRU-3 Provides Sequence Training for Health Trainees



NAMRU-3 member Mary Younan (right) shows students how to use an automated sequencer. Photo by George Rafi Pakchanian.

By Darnell P. Gardner, Jr., Public Affairs Officer, NAMRU-3

The U.S. Naval Medical Research Unit No. 3 (NAMRU-3) Virology and Zoonotic Disease Research Program (VZDRP), with co-sponsor WHO, hosted a molecular genetics and sequencing training course October 4-18 in Cairo. Trainees were from regional National Influenza Centers (NICs) in Egypt, Oman and Morocco.

"During the recent influenza pandemic, analyzing the genetic sequence of influenza viruses was successfully used to quickly identify cases which were resistant to antiviral drugs. More advanced sequence analysis helped to identify and track new strains of influenza when they appeared. Through the use of these

techniques, a number of regional National Influenza Centers requested that WHO arrange for training in sequencing and sequence analysis. NAMRU-3, serving as a WHO collaborating center, was immediately contacted to conduct the training," explained Cmdr. Vincent Barthel, department head, VZDRP.

Morning sessions began with lectures providing background information and theory to the students. During afternoon sessions, students were taken either to the virology laboratory for practical demonstrations of relevant laboratory techniques or to the computer room for instruction on the use of virology-specific software. The course was presented in English, however, Arabic and French speakers were on hand if further explanation was

necessary for those for whom English is a second language.

Students worked with H1N1 influenza isolates from last year's pandemic and seasonal H3N2 isolates from the year before. While in the laboratory, they learned how to prepare the isolates for analysis in NAMRU-3's automated sequencer, an apparatus used to determine the genetic sequence of viruses. Sequence analysis is necessary to determine where a particular virus might have come from and how it spreads throughout a community.

After determining the sequence, they proceeded to the computer laboratory to conduct Internet research for specific mutations known to cause drug resistance. Once a mutation is identified, a phylogenetic tree (a graph showing how the different viruses are related) is constructed and uploaded to the GENBANK, an annotated collection of all publicly available DNA sequences, so scientists all over the world can access the data.

Maj. Claire Cornelius, deputy department head, VZDRP, said, "The feedback from the students on the training was excellent. They felt they had learned important techniques which would help their National Influenza Centers provide important information for their respective Ministries of Health."

Holiday Postal Service Deadlines

For those of you who would like to send packages or letters to friends and family members overseas for the holidays, deadlines are coming up quickly. The recommended date for economy-priced holiday packages to servicemembers in the Middle East or other locations around the world is November 12. For more information about additional deadlines, package prices, and restrictions, go to <http://www.defense.gov/News/NewsArticle.aspx?ID=61209>.

Gorgas Memorial Library Receives Award

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analyses on each organization's malaria and dengue research. Librarians also developed publication and citation metrics for the organization's Balanced Scorecard, which improve bench scientists' workflow, facilitating discovery and citations for future

manuscripts, and identifying mission success. Customers indicated high satisfaction for new and already established information services that are instrumental for researchers and ultimately preserve the fighting strength of Marines, sailors and soldiers and their early return to duty.

Dr. Paul Lehmann Lectures on ELISPOT Assays at NMRC

By Milton Maciel, Jr. and Alexander Maue, NMRC Enterics Diseases Department

Dr. Paul V. Lehmann presented a seminar entitled "ELISPOT assays for delineation of T cells effector classes and activation States" October 1 at the Naval Medical Research Center (NMRC) by invitation of NMRC's [Enterics Diseases Department](#).

Dr. Lehmann is a professor in the Department of Pathology at the Case Western Reserve University School of Medicine, founder and chief executive officer of Cellular Technology Ltd., and a leader in the field of T cell immunology with over 30 highly ranked publications dedicated to establishing the scientific basis of cytokine ELISPOT analysis.

ELISPOT is among the most used methodologies for characterization and quantification of T and B cell subsets to the level of a single cell.

In the last decade, the methodology has been adapted to many applications and it is currently available to most research fields, from basic research to vaccine development and clinical response monitoring.

During the seminar, Dr. Lehmann overviewed findings of his research on the secretion of Interferon-gamma (IFN- γ), perforin, granzyme, and other cytokines in HIV positive subjects. Among other results, he showed that in HIV positive patients with CD4⁺ T cell counts greater than 200, CD8⁺ T cells



(Left to right) Milton Maciel, Jr., PharmD, PhD, Immunology-ETEC Vaccine Program; Dr. Paul V. Lehmann, professor, Case Western University, CEO and founder, Cellular Technology Ltd.; Jaya Ghosh, PhD, staff scientist, Cellular Technology Ltd.

were a source of Tumor Necrosis Factor-related Apoptosis-inducing Ligand (TRAIL). Antigens to which patients have likely been exposed when CD4⁺ T cell levels were high (influenza, CMV, etc.) did not induce TRAIL. Within the HIV positive donor population with low CD4⁺ T cell counts, a dissociation of the IFN- γ and TRAIL response to different HIV peptides was detectable, which suggested impaired immunity to antigens that triggered TRAIL in the absence of IFN- γ . These "helpless" CD8⁺ T cells (i.e., primed in the absence of CD4⁺ T cell help) may

play a crucial role in HIV infection because they may impair CD8⁺ T cell control of HIV and other infections and possibly contribute to the depletion of CD4⁺ T cells via apoptosis. In conclusion, immunizations and infections in this "helpless" state might result in ineffective CD8⁺ T cell responses.

Finally, Dr. Lehmann concluded his presentation by expressing his vision that ELISPOT methodologies will likely play a role in the upcoming proteomic field by allowing the identification of innumerable cell products from a variety of cells, not only immune cells.

Team from NAMRU-3 Confronts Lassa Fever in Ghana

By Darnell P. Gardner, Jr., Public Affairs Officer, NAMRU-3

A team from the U.S. Naval Medical Research Unit No. 3 ([NAMRU-3](#)), its Ghana Detachment, and the Noguchi Memorial Institute for Medical Research combined their efforts to investigate Lassa fever, a viral hemorrhagic fever historically found in Sierra Leone, but that may also be in Ghana.

Lt. Cmdr. Karl Kronman, officer in

charge, NAMRU-3 Ghana Detachment, explained, "Some deaths recently occurred in patients from areas of Sierra Leone where Lassa fever had not usually been diagnosed, highlighting limited knowledge of the disease. Lassa virus is presumed to be present in *Mastomys* mice throughout West Africa and is capable of being spread to humans in outbreaks. However, the exact areas of risk remained poorly understood due to limited studies in humans and the rodents that carry the

disease. Recently, a map of West Africa based on mathematical models was drawn to better estimate the risk to populations throughout the region."

Using the risk map as a guide, the team identified villages that were at risk of Lassa fever. They then spent several days capturing rodents for testing. This required setting two to three hundred traps every night in fields and houses.

The team had to follow field
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Team from NAMRU-3 Confronts Lassa Fever in Ghana



Local townspeople place a rodent trap inside a domicile. Photos provided by Lt. Cmdr. Karl Kronman.



Children watch as the NAMRU-3 team and local townspeople position rodent traps in a house.

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biosafety level three procedures, which included respirators, gowns and gloves. They received some quizzical looks from village residents when they came to collect house mice in full protective attire.

"The first day we got a lot of attention in the village, but after that we became part of the routine. Only the children continued to want to watch what we were doing, and stood outside our roped off area to observe us," said Dr. Fady

Guirguis, a NAMRU-3 clinical veterinarian.

In addition to capturing up to 100 rodents, the team collected serum samples from more than 50 human volunteers, who gave their informed consent to test for antibodies to Lassa virus. The U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) will provide the laboratory expertise to test for Lassa virus and other rodent-borne diseases. Another field trip is planned for November, before the rainy season ends.

NAMRU-2 and REDI Center Provide New Capability in Southeast Asia

By Lt. Cmdr. Gary Brice, NAMRU-2 Singapore

U.S. Naval Medical Research Unit No. 2 ([NAMRU-2](#)) Singapore recently launched a new agreement with the Regional Emerging Diseases Intervention (REDI) Center. The REDI Center is an intergovernmental research and training organization founded by Singapore and the U.S. to enhance the region's capability and capacity to deal with emerging and re-emerging infectious diseases such as pandemic influenza and SARS. Housed in Singapore's hi-tech Biopolis biotechnology cluster, scientists and doctors at the REDI Center act as a regional resource for training on laboratory biosafety, influenza diagnosis, outbreak investigation and response, and pandemic preparedness for healthcare providers in the region.

The agreement aims to strengthen the capacity of regional public health

systems to identify, respond, and manage infectious disease outbreaks and to enhance epidemiological data management and communication. Activities in 2010 included a symposium on electronic surveillance systems for monitoring infectious disease outbreaks. The symposium highlighted the application of information and communications technologies to collect health data from remote settings to enhance situation awareness and assist public health authority decision to commit resources for disease outbreak investigation and response.

Participants at this international symposium included representatives from the Singapore Ministry of Health, Ministry of Defense, DSO National Labs, the U.S. Armed Forces Health Surveillance Center/Global Emerging Infections Surveillance (AFHSC/GEIS), Johns Hopkins University Applied Physics Laboratory, and the National

Center for Laboratory and Epidemiology from Vientiane, Lao People's Democratic Republic (PDR).

Also in fiscal year 2010, NAMRU-2 and the REDI Center, along with other regional developmental partners including the CDC, Institut Pasteur, and the National University of Singapore conducted an international short course on Disease Outbreak Investigation. The five-day course provided didactic training, case study presentations and tabletop exercises to over 40 participants from regional civilian and military public health and medical departments, including Laos, Vietnam, Cambodia, Singapore and Indonesia. Planned activities for fiscal year 2011 include laboratory biosafety and biosecurity training, a review and analysis of electronic disease surveillance systems in Laos and subregional training workshops aimed at fostering national cooperation and relationship building.

NMRCD Participates in Peruvian Epidemiologist Day Commemorations

Since 1976, Peru has commemorated September 22 as "Epidemiologist Day" to recognize the efforts carried out by Peruvian epidemiologists in promoting the health of the Peruvian population. The Naval Medical Research Center Detachment (NMRCD) participated in a couple of Epidemiologist Day events.

On September 22, officers and staff from NMRCD joined the General Directorate of Epidemiology (DGE), the Peruvian equivalent of the U.S. CDC, in a ceremony at the Peruvian Ministry of Health. The Minister of Health, Dr. Oscar Ugarte, specifically noted NMRCD's technical and logistical support for disease surveillance throughout the country, especially during the H1N1 epidemic of the previous year.

On September 28, NMRCD joined the Peruvian Army Health Command in celebrating—in addition to the Epidemiologist Day—the fifth anniversary of the Peruvian Army's electronic reporting system for disease surveillance. First implemented in 2005, this reporting system has proven useful for establishing baseline estimates of disease trends, alerting Army health personnel of possible disease outbreaks, and building local capacity in disease surveillance and outbreak detection.



(Left to right) Capt. John W. Sanders, NMRCD; General Marco Antonio Figueroa Guevara, deputy commanding general, Peruvian Army Surgeon General Office; General Abel Marocho Rojas, commanding general, Peruvian Army Surgeon General; Dr. Luis Suarez Ognio, director general of epidemiology, Peruvian Ministry of Health; Dr. Jorge Fernández Malaspina, head, Sanitary Intelligence, COSALE, following an Epidemiologist Day Ceremony. Photo provided by NMRCD.

NMRCD collaborates with the Peruvian Army through training activities on disease surveillance conducted at reporting sites; provision of laboratory and personnel for outbreak investigations; and participation in efforts to characterize health threat situations,

analyze emerging scientific concerns, and answer scientific questions. The Peruvian Army Surgeon General, General Abel Marocho Rojas, specifically thanked NMRCD and looked ahead for many more collaborative opportunities.

Greetings from the NMRC Ombudsman!

This past month we celebrated the 235th birthday of the United States Navy. I would like to add my support and thank you to all the Sailors that serve our country here and abroad ensuring our freedom.

The Exceptional Family Member Program (EFMP) was established by the Navy to support Sailors and their families with special needs. EFMP liaisons are now located at Norfolk, Jacksonville, San Diego, Bremerton and Washington, D.C. All Fleet and Family Support Centers can now provide referrals and information for EFMP. Please contact your local Fleet and Family Support Center for more information.

United Through Reading is a non-profit group that unites families facing physical separation by facilitating the bonding experience of reading aloud together. This program is available to all deploying military units and at select USO locations. Military personnel create a DVD of them reading a book aloud that is sent home for the children to watch. It allows the deployed family member to be involved in parenting from afar, lets the children know that their family member is safe and thinking of them, and provides support to the spouse at home. Visit <http://www.unitedthroughreading.org/>.

Holiday Postal Service Deadlines are coming up quickly. The recommended date for economy-priced holiday packages to servicemembers in the Middle East or other locations around the world is November 12. For more information, go to <http://www.defense.gov/News/NewsArticle.aspx?ID=61209>.

If you need information on these or other resources, please contact me at angela.prouty@med.navy.mil or 217-722-4981.

Angela Prouty
Ombudsman, NMRC

Who We Are - NAMRU-2

Naval Medical Research Unit No. 2 Around the Globe

The Change of Command for U.S. Naval Medical Research Unit No. 2 (NAMRU-2) was held June 17, 2010, at Camp Smith, Hawaii, where Capt. Trevor Jones relinquished command to Capt. Gail Hathaway. This Change of Command also marked the official relocation of the NAMRU-2 headquarters from Jakarta, Indonesia to Pearl Harbor, Hawaii. From the newly established headquarters, NAMRU-2 maintains a distributed laboratory network in South-east Asia, including Cambodia, Laos and Singapore.

The NAMRU-2 detachment in Phnom Penh, Cambodia, established by agreement with the Cambodia Ministry of Health in 1998, is housed in a two-story building at the Cambodian National Institute of Health campus and includes a diagnostic laboratory and epidemiology and administrative offices. The detachment is currently staffed by Capt. William Rogers, Lt. Chad Yasuda, five local foreign civilian employees and over 85 contracted laboratory technicians and medical/field staff. Current investigations include studies on malaria drug resistance, avian influenza transmission studies and passive surveillance at nine

district clinics for etiology of febrile illnesses. The laboratory also engages with the Cambodian military for training of medical staff.

The NAMRU-2 Detachment in Singapore, established in November 2007, reflects Navy Medicine's priorities in response to global emerging infectious disease threats and realigns the activity under NAMRU-2's regional mission of infectious disease surveillance and control in Southeast Asia. The detachment is located at the Office of Defense Cooperation (ODC) at the American Embassy in Singapore and is currently staffed by Lt. Cmdr. Gary Brice, a microbiologist. The position establishes an operational platform providing technical and logistical support to promote NAMRU-2's relationships and collaborative activities throughout the region and further strengthens the U.S. Government's relationship with Singapore, a strategic partner in Southeast Asia.

Within Singapore, NAMRU-2 collaborates with the Ministry of Health and Ministry of Defense agencies; the Emerging Infectious Disease Program at Duke University/National University of Singapore (Duke/NUS) Graduate

Medical School; Defence Medical and Environmental Research Institute's DSO National Laboratories (Kent Ridge); the Regional Emerging Disease Intervention (REDI) Centre; the National Environment Agency's Environmental Health Institute; and local biotech.

Current activities with Singapore include respiratory disease surveillance in Singapore Armed Forces personnel, malaria drug resistance surveillance and pre-clinical malaria vaccine

studies. In collaboration with the Singapore National Environmental Agency in Singapore and Commander Task Force-73 (CTF-73)/COMLOGWESPAC, NAMRU-2 recently completed field trials evaluating different mosquito mass trapping devices onboard Sembawang Terminal. In Fiscal Year 2011, these studies will be repeated on military training grounds of the Singapore Armed Forces to evaluate their utility. Also in Fiscal Year 2011, Lt. Cmdr. Brice will initiate an expatriate influenza surveillance study, enrolling 2000 participants from the U.S. and international community that reside in Singapore. Additional studies are planned for Fiscal Year 2011 in My Tho, Vietnam and Sri Lanka in collaboration with Duke/NUS and the local respective Ministries of Health.



Capt. Gail Hathaway, NAMRU-2 commanding officer, visits with Singapore Armed Forces Chief Medical Command/ Surgeon General, General Benjamin Seet. From left: Maj. Nick Cheong, SAF biodefence chief; Mr. Arturo Hines, U.S. Embassy Singapore political/economics officer; Lt. Bryan Heintschel, NEPMU-6 entomologist; Lt. Cmdr. Gary Brice, NAMRU-2 Singapore; Capt. Hathaway; General Seet; Col. Wee Lee Kang, chief Naval medical officer; Maj. Vernon Lee; Ms. Christine Gao.

NMR&D News

is an authorized publication of the Naval Medical Research Center, 503 Robert Grant Avenue, Silver Spring, Maryland, 20910.

NMR&D News is published monthly by the NMRC Public Affairs Office.

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